

UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

Date : Week ended 16 September 1971  
Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

Friday 10 Sept Unscheduled Maintenance on Disk Pack A  
Offline 0918-1330.  
CTY hung up System reloaded Offline 1450-1526.

Monday 13 Sept Lister Problems No Batch Processing 1255-1400.  
System Reloaded Offline 1400-1412.  
System stops Offline 1654-1730.  
Unscheduled CDR Maintenance 2055-2115.

Tuesday 14 Sept System failure, 1052-1053.

Wednesday 15 Sept System failure Offline 1535-1600, 2010-2017.

Thursday 16 Sept System failure, parity error Offline 1243-1305.

Schedule for forthcoming week: Maintenance 0700-0900, 2300-2400.  
Operations 1000-2215.

1.2 GE-225 System

Thursday 16 Sept Card Punch Maintenance 1159-1205.

Schedule for forthcoming week: Maintenance 0700-0900, 2000-2130.  
Operations 0900-2000, 2130-2400.

2. MANUALS

2.1 DDT-10

Chapter 3 of Technical Manual No 12 (PDP-10 Utility Programs) has now been completed. It describes DDT-10 (Dynamic Debugging Technique) in detail, and is available from the Bookshop for \$1.65.

2.2 System User's Guide Revision

The first Revision List for the System User's Guide is now available. It is free, and may be obtained from the Centre.

3. NEW LOGIN, LOGOUT, LOADER AND DECODE

3.1 In conjunction with the release of the new version of Batch on 9 Sept, new versions of LOGIN, LOGOUT, LOADER and DECODE were implemented. As well as incorporating changes made necessary by the introduction of the new BATCH, these programs were changed in order to speed up their operation, and to provide improved error messages.



3.2 Two of the changes to DECODE need to be mentioned specifically -

- (a) .RUN (with no arguments) will not attempt to execute, if there were errors in compilation.
- (b) .LOG PJ =1 (for example) gave an 'ILLEGAL ASSIGNMENT' because of the space before the equals. This has been fixed.

3.3 A further change will be made to LOGOUT as soon as possible. If the user's logged out limit is exceeded while logging out in BATCH, the user's file directory will be listed once only before any files are deleted. At present, the directory is listed three times.

#### 4. CORE STORAGE ALLOCATION FOR THE FORTRAN USER

Following the recent implementation of a new FORTRAN system that affected a number of users running very large programs, the Centre has received enquiries about the actual amount of core storage available for a user's FORTRAN program.

It is difficult to define a firm figure for the core area available for a user's program. Of the 24K overall limit, 4K is always required by the basic FORTRAN operating system. This handles input/output, format control and character conversion. The remaining 20K of core must contain the user's program, his data areas and all the other FORTRAN library facilities requested by his program. As well as the standard library routines of SQRT, SIN, COS, LOG, etc., various library routines are called for such operations as double precision or complex arithmetic, exponentiation, and for statements such as DEFINE FILE, ENCODE, END, etc. Thus, the amount of core required by FORTRAN is a variable quantity depending upon the particular facilities requested.

While the Centre will always endeavour to keep the maximum amount of core storage available to the user, future software releases from manufacturers may result in variations to the boundaries given above. It is suggested that users running large programs segment their programs into overlays or arrange for large data areas to be stored on disk.